Volume 27 No. 4 April 1998

Anchorage Amateur Radio Club

General Meeting Friday April 3, 1998

Ham's on the Trail again!!

IN THIS ISSUE:

Officers

President	Peter Bailey WL7BW
Vice President	Paul Spatzek WL7BF
Secretary	Susan Woods NL7NN
Treasurer	John Lawson NL7NC
Trustee	John Wolfe AA0NN
Activities Chairman	John Lynn KL0CY
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Mel Saunders AL7PB
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One Year Board Members

Dianne Hammer NL7KN
Fred Erickson KL7VC
John Orella KL7LL
Corny Eastman KL0FK
Jack Crowell W6BUS
Dave Filley WL7CDJ

WEB PAGES:

AARC	http://kl7aa.akconnect.com
	Email to kl7aa@akconnect.com
SCRC	http://servcom.com/worcester/scrc.htm
EARS	http://ww2.customcpu.com/kl7air/default.htm
KL7J	http://www.alaska.net/~buchholz

Propagation Report Recording 566-1819

please let us know if there are other club pages or good starting points that should appear here

News Letter Submissions, Information or corrections:

Edythe Lynn, KL0EO
Email: jelynnjr@customcpu.com
Facsimile: 907-338-4791
Mail: 7013 Trafford Ave. Anchorage 99504

KL7G CODE PRACTICE SCHEDULE

Schedule: 7:00am, 10:00am, 4:00pm, 7:00pm, 10:00pm
AK time, every day
Frequencies: 3575 KHz and 145.35 MHz
Sending Speeds: 22 wpm, 15 wpm, 7 wpm

Nets in Alaska:

The following nets are active in South-central Alaska:
Alaska Sniper's Net 3.920 MHz 0300 UTC daily
Alaska Bush Net 7.087 MHz 0500 UTC daily
Alaska Motley Net 3.933 MHz 0600 UTC daily
Alaska Pacific Traffic Net 14.292 MHz 1900 UTC daily
QCWA net 146.97/.37 repeater Sundays 9:00 PM local
No Name Net 146.85/.25 repeater Sundays 9:00 PM local
Son of Sideband Net 144.20 USB Mondays 9:00 PM local
Big City Sideband Net 144.20 USB Tuesdays 8:30 PM local
ARES net 147.30/.90 Mhz Thursdays at 8:00 PM local
PARKA net 147.30/.90 Mhz Thursdays at 9:00 PM local

Anchorage Area Repeaters

KL7AA systems at Flattop Mt., 2,200 ft
146.34/94 Mhz, 80 watts, autopatch, 100/141.3 Hz PL
223.34/224.94, 25 watts, no patch, no PL
444.70/449.70, 25 watts, autopatch, 100/141.3 PL
KL7ION at Mt. Gordon Lyon 4,700 ft
147.30/90 Mhz - 80 watts, no patch, no PL
KL7AA, Mt. Alyeska, 2,400 ft.
146.16/76 Mhz, 25 watts, no patch, 141.3 Hz PL
KL7CC, Anchorage Hillside, SCRC club
146.97/.37 Mhz, autopatch, 103.5 Hz PL
KL7DJE at Grubstake Peak, 4,500 ft.
147.09/.69 Mhz, 25 watts, no patch, 100 Hz PL
444.925/449.925, 10 watts, no patch, 141.3 Hz PL
KL7JFU, Palmer, MARA club
146.85/.25, autopatch, no PL
KL7AIR Elmendorf, EARS
147.27/.87 no patch, 107.2 Hz PL

This Months Spotlighted Speaker

This month we are going to have several speakers addressing the members regarding the Ham's on the Iditord Trail.

NON-MEMBERS WELCOME: You don't need to be a member of the club to attend the meetings or any other AARC events, although we do encourage any non-member to join our group. See the front cover of this newsletter for details of the meetings.

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VHF NETS ABOUND

All of you new HAMs take note: there are lots of nets and nice folks to visit with. The Son of Sideband Net runs each Monday night at 9:00 PM local on 144.200 Mhz USB with a 6 Meter extension on 50.125 Mhz USB. On Tuesday night, the Big City Sideband Net operates on 144.200 USB at 8:30PM local, then on 50.125 USB at 9:00 PM and finally on 446.00 FM at 9:30 PM. On Thursday the ARES net starts at 8:00 PM on the 147.30/.90 repeater with Amateur News line followed at 9:00 PM by the PARKA net. On Sunday there are two nets at the same time. In Anchorage, the QCWA net runs at 8:00 PM on the 146.97/.37 repeater (103.5 Hz PL) and in the valley the 850 no name net runs on the 146.85/.25 repeater.

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NEWSLETTER ARTICLES; All articles from members and interested persons are very welcomed. If you wish to submit any articles, jokes, cartoons, please have it typed or neatly handwritten. It can be submitted on computer disk, faxed, or via Email to the newsletter editor at the address listed on the cover.

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Regular HAM Gatherings:

* **Tuesdays, 11:30am to 1:00pm:** Join the gang for lunch and an eyeball QSO at the Royal Fork, Old Seward Hwy. (South of Dimond Center). Although billed as the QCWA lunch, this is open to all and is a good time of fellowship.
* **Saturdays, 7:30am:** Here is a great way to get started on the week-end come and meet with some of the locals and have a great breakfast at Phillips Restaurant, at the corner of Arctic and International. Great Fun.

UPCOMING EVENTS

April 3: AARC general meeting at 7PM Carr-Gottstein Building APU Campus. Talk in on 146.97 repeater

April 4: VE Licence Exams. 6:30pm Carr-Gottstein Building, APU Campus. Bring photo ID, copy of license (if any) and any certificates of completion

April 10: SCRC general meeting at 7PM RM 220, Business Ed. Bldg., UAA campus. Talk in on 147.57 simplex.

April 15: VE License Exams, Hope Cottage Offices, 540 W. International in the Board Room. At 2pm. Be sure to bring photocopy of your license, photo ID, and any certificates of completed elements.

April 22: VE License Exams, Eagle River VFW at 7PM. Be sure to bring photocopy of your license, photo ID, and any certificates of completed elements.

April 25 & 26: MARA club Hamfest, at the Palmer Train Station. Come visit with the folks from the valley and trade some stories and equipment.

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SPECIAL NOTICE:
The American Red Cross has a new address 235 E. 8th Ave., PO Box 10-1139, Anchorage, AK 99510-1139

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Stranded part 4

by Bruce McCormick, WL7YR

You are cold, Very tired and your leg hurts like #$@#.. Its about 04:30 and very dark.
You need to move around (don't move the leg.) swing your arms to help bring back the circulation. Move your good leg to help circulation,

Now would be a good time to have a small bite of the candy bar you found in your pocket.

As you drift in and out of the sleep mode you hear cars on the highway, peoples voices. even a dog barking. Could someone be looking for you.

State Troopers have found your car and telephoned your home looking for the owner of the car only to find out you haven't been heard from since early today and people are worried about you.

The State Troopers have called out the search and rescue groups and they are beginning to arrive at the trail head .

You wake up to the yapping of a big ugly dog with a orange vest on. He is really excited as he runs back and forth barking. Soon a young lady calls to the dog, he bounds into the woods and then back to you.

Finally the dog sits down and waits for the handler to arrive. She quickly alerts others by radio of her location and that she has located the lost subject and will need a full response as the subject has a broken leg and will need to be carried out. The area is too dense for a helicopter evacuation.

As more team members arrive, they begin to splint your leg and get you ready to be placed in the litter for the journey down the mountain.

The rescue team radios' to Trooper Dispatch that they have found you alive and they will need an ambulance waiting when you get there in about 3 hours.

It's now close to noon and you are just getting to the parking area where the rescue team is waiting along with the ambulance to take you to the hospital.

It's been an ordeal that makes you think that it came out OK, but it could have gone the other way and you could have been there a long time before anyone found you. You may have been unlucky and ended up part of the Alaskan wilderness food chain. You promise the Search teams that when you get out of the hospital that you will come to a meeting and tell you side of the story.

Things to remember.

1. Always tell someone where you are going and when you are to return.
2. Never go out alone. Take a friend or two.
3. Take emergency stuff with you even on a short day hike.
4. If hurt or lost. **Stay put**! Its a lot easier to find a stationary subject than one moving around

If any one would like more information about stuff to take. Information on Rescue groups around Alaska .

You can contact Bruce McCormick at 1-907-333-0340 or E-mail at mccorpp@corecom.net

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Research raft carrying Amateur Radio lost
ARRL

A research raft carrying Amateur Radio station HL0JQT/mm was lost January 24 in heavy seas off the coast of Japan. Japanese Maritime Safety Agency authorities responded to a distress call that the crew was extremely exhausted. It's not clear if the distress call went out on Amateur Radio frequencies. However, bodies of three of the crew members were recovered, but a fourth was missing in the frigid waters.

The 23-foot research raft, which had a sail but no engine, was attempting a voyage from Vladivostok, Russia, to Pusan, South Korea, when it capsized in stormy seas. News reports from South Korea said the four-man crew, led by 48-year-old skipper Lee Duk-young, was attempting to retrace the sea route linking Palhae, an ancient Korean dynasty that originated in northeast China, to the Korean peninsula.

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Possible P3D launch in May
AMSAT-NA/*Newsline*

AMSAT's Phase 3D Amateur Radio satellite could be in orbit this spring. According to reports from Ham radio space organization, Phase 3D Project Leader Karl Meinzer, DJ4ZC, has met in Paris with European Space Agency officials to discuss the possibility of including Phase 3D as a payload on the third test flight of the Ariane 5 booster.

Ariane 503 is expected to be launched sometime in May. AMSAT admits that getting their satellite manifest to be launched on that flight is a best a long shot. If Phase 3D does get to fly on Ariane 505 it could be operational sometime next summer.

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KB8GGK helps heart attack victim
ARRL

Out enjoying last day of deer hunting season last November, John McClellan, KB8GGK, heard an urgent call over the Cherryland Amateur Radio Club repeater near Traverse City, Michigan. Traveling through the area from out of town with his wife, Ken McClurken, KB8VG, reported he was having chest pains and needed directions to the nearest hospital. McClellan directed the coupled to a local hospital, while Jan Newton, KC8HJQ, who'd heard the call, dialed 911. Bill Shenk, W8PIT, of the Cherryland ARC, reports McClurken was released from the hospital a week later and was recovering at his home in Grandville, Michigan.

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Date slips for next SAREX mission
ARRL Letter

The launch date for the next Shuttle Amateur Radio Experiment (SAREX) payload, aboard STS-93, has slipped until late this year. STS-93 originally was scheduled to go up in August, but its primary payload will not be ready by then. The five-day mission is the only SAREX mission scheduled during 1998. But another flight, STS-95 in October--the flight that will carry once and future astronaut and U.S. Senator John Glenn into space -- has been under consideration for several months as a possible SAREX flight, according to AMSAT Vice President for Manned Space Programs Frank Bauer, KA3HDO. Nothing has been confirmed yet.

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Morse code book now on the Internet
Rick McCusker, KO6DJ, Editor

The second edition of the extensive book "The Art and Skill of Radio-Telegraphy" is now available on the Internet at the Morse Code Enthusiasts of Scotland website. The address is: http://www.joates.demon.co.uk/megs/

I took the time and looked at the book, and I find it to be very well written and quite informative. It covers lots of CW history, tips on learning the code and lots of help in improving your CW skills. It is well worth seeing!!

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New York taxi war
Via Hudson Division Loop, ARRL; *Newsline*

Between 1,500 and 2,000 of the 11,800 taxis in New York City have modified CB radios, many of which are operating in the 10 Meter ham band. So says Garry Smith, W6TER, writing in a recent edition of the Hudson Division Loop electronic newsletter.

According to Smith, the primary reason that cabs like the modified radios is that the FCC allocated 40 CB channels are crowded. Also, the taxis like to group ethnically. The result is that many of the modified "taxi channels" fall in the low end of our 10 Meter amateur band.

At its recent meeting, the ARRL's Board of Directors acknowledge the problem and the actions by the FCC and the New York City Taxi and Limousine Commission to combat it. But the Board wants agencies to do even more. The ARRL leadership is urging the confiscation of equipment and fines to drivers who fail to comply by removing any and all illegal transmitters from New York City cabs.

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Fire help
Newsline

Amateurs furnished assistance during a recent structure fire in White Plains, New York. Alan Crosswell, N2YGK, reported the local Amateur Radio Emergency Service received a request from the American Red Cross for communications at the fire scene.

Amateurs established communications from the incident point to three local churches that were being used as service centers. Additional communications were set up at White Plains High School which served as a shelter for those displaced by the Blaze. Ninety families were affected by the fire which claimed one life and is blamed for ten injuries.

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Upcoming Emergency Drill
by Lil Marvin NL7DL

There will be an emergency drill conducted by the Municipality of Anchorage Emergency Office Coordinator. The drill will be held on Friday April 30th, the exact start time being currently unknown. The city is requesting amateur radio participation as has been done for the past several years. Details of the drill are currently unknown and many details will not be made unknown until just after the drill begins. Hams will be needed at the EOC office, Alaska Regional Hospital, Providence Hospital, the Alaska Native Medical Center, Our Lady of Compassion Care Center, Mary Conrad Center, city buses (which will be used to transport "victims"), incident command center (the location of which is currently unknown), Red Cross (they would like to have 14 HAMs if possible), and more HAMs will probably be needed at other locations. You do not need to be a member of ARES in order to participate in this drill, so we would welcome any HAMs who would like to volunteer as communicators. You will need a 2-meter rig, and a decent antenna. A spare battery would also be nice but not absolutely required if your battery is charged. If you can participate, please contact Lil Marvin NL7DL at 277-6741 or Email her at rlment@alaska.net. Thanks to all who can help!

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FCC computer failure
FCC, ARRL, Newsline

The FCC's Amateur Radio licensing computer system has been down, it has just come back on line as of February 23. Bill Pasternak, WA6ITF, says the regulatory agency's computer system failed on February.

The situation has affected the FCC's Gettysburg, PA, license processing facility, and has frustrated those who have been hoping to learn their new call signs or updated licensing status. The on-line FCC public databases on the Internet also have been affected.

Sources at the FCC attribute the situation to a combination of problems. The FCC's computer system has failed before, but not for this long.

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Regulatory items from the ARRL Board
ARRL

In response to repeated member complaints of malicious interference and the use of foul language on the amateur bands, the Board established an Enforcement Task Force to push for better rules enforcement from the FCC, Vice President Joel Harrison, W5ZN, will chair the 1[illegible] member panel. Other members include President Staffor[illegible] Directors Joe Falcone, N8TI, Frank Fallon, N2FF, Kay Craigie, WT3P, Fred Heyn, WA6WZO, and Marshall Quiat,

AG0X, Vice President Hugh Turnbull, W3ABC, General Counsel Chris Imlay, W3KD, and Field Services Manager Rick Palm, K1CE. The Task Force will oversee and work closely with the Amateur Auxiliary and make recommendations to the Board on enforcement issues.

On a 11-4 vote, the Board voted to **NOT** draft a petition to the FCC to simplify the Amateur Radio license structure and increase HF privileges for Novice and Technician Plus licenses while continuing to renew existing licenses; rear-range current HF CW allocations for Novice and Tech Plus licensees to provide expanded HF phone frequencies; add 75M and 15M phone privileges to Tech Plus holders.

Rejection of the plan completes the Board's consideration of a committee proposal that it first received at its January 1997 meeting, and that had been the subject of membership study and comment during the year.

On a 10-5 vote, the Board declined to refer to the Executive Committee for study a proposal to ask the FCC to reduce the number of license classes to three.

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Are FM spectrum restrictions needed?
Worldradio

The proponents of non-FM point to point communications say that formal restrictions are needed to keep FM users from causing interference to the users of other modes on our VHF and UHF bands. FM interests are already vowing a fight to keep access to all the VHF and UHF spectrum that they now have.

Cross-mode interference has always been a problem on any Ham band. But now there appears to be an increase in the incidence of both inadvertent and purposeful interference to weak signal, EME, local SSB, CW and even AM contacts on the 2-Meter, 1215-Meter and 70 Centimeter bands.

The non-FMers say the users of FM are ignoring established ARRl-approved band plans - that they are popping up wherever they please and destroying the ability of other HAMs to enjoy their modes.

Some FMers say it's the utility of FM in day-to-day communications that makes it so valuable to every Ham. Regardless of the frequency being used, as long as it's one that's legal in the FCC's Part 97 rules.

Other FM enthusiasts are going a lot farther. They are saying they did not write the bandplans, they are not members of the ARRL and they cannot be forced to abide by the.

The ARRL Board of Directors is expected to at least look at the problem of FM incursion into what has traditionally been non-FM spectrum at its first meeting of 1998.

(Ed: See "Regulatory aspects of the ARRL Board meeting," above, particularly the statement that "the ARRL also will ask the FCC for a declaratory ruling to put teeth into the voluntary band plan concept.")

For ionosphere enthusiasts
Worldradio

An item in the October 1997 ITU News says that scientists using the joint European Space Agency/NASA Solar and Heliospheric Observatory (SOHO) spacecraft have discovered "jet streams" or "rivers" of hot, electrically charged gas, called plasma, flowing beneath the surface of the sun. They also found features similar to trade winds that transport gas beneath the sun's fiery surface. These new findings will help them understand sunspot cycles and associated increases in solar activity that can cause power and communications disruptions.

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Poor Morse code skills = $10,000,000.00 damage
Jack R. Main, W4YCZ, and various sources

On the night of October 14, 1996, the aircraft carrier USS *Theodore Roosevelt,* and the cruiser USS *Leyte Gulf,* were engaged in pre-deployment drills and test off the Atlantic Coast. The *Roosevelt* was testing its Challenge Athena communications system, which was getting interference from the ship's radar system. At the same time, the *Roosevelt* was also testing its propulsion systems and conducting electric power shifts - which caused communications gear to cease operations at times. Part of the propulsion system tests included putting the engines astern for long periods of time.

The *Leyte Gulf* was trailing the *Roosevelt* at a range of about 4,000 yards, and had not been informed of the tests being conducted on the *Roosevelt.* Because the communications systems on the *Roosevelt* were not able to be used, the two ships were using flashing light to exchange messages, a method used in yesteryear's Navy, but apparently a lost art today. It took 25 minutes for one message to be received and passed on to the bridge. Flashing light messages are sent using Morse code, and the text of the message that was received was garbled.

At 2:44 am, the *Roosevelt* went to "Emergency Back Full" on its engines and was going astern at 17 knots. At 2:49 a signalman aboard the *Roosevelt* started to send a message that said, "My engines are astern." The *Leyte Gulf* had not been told of this maneuver and the officer of the deck was confused by the movement. After recognizing the danger that was approaching, the *Leyte Gulf* also went to "Emergency Back Full" on its engines, but it was to late to avoid a collision. The *Roosevelt* and *Leyte Gulf* collided at 2:52 am.

The result? Over $10,000,000.00 in damage to the two ships. Fortunately, there were no deaths or serious injuries involved.

The Board of Inquiry results stated that 25 minutes to deliver one message by flashing light using Morse code was unsatisfactory.

Phone Lines Cut

Southern Humboldt Amateur Radio Club "SHARCbites"

On October 10, 1997, around 9 am, Margaret, KE6FBP, was trying to use the phone patch, and was having no luck. I always listen closely to hear if someone needs help when the phone patch is unsuccessful in case it is an emergency.

Margaret called out to see if anyone know the reason the phones were out in Redway. I tried to open the 146.79 phone patch and was able to call Jack and Stan at the local phone company. Stan was able to tell us that the phone line had been cut, and that service in and out of Redway could be down for a few hours or less. Margaret and I discussed the fact the the California Highway Patrol had a radio system, but the Redwood Rural Health Center could have a need for communications Someone could be jeopardized should the Health Center need to call the hospital or anywhere.

Margaret Sisk, KF6FBP, went down to the Health Center. Nancy Peregrine, KB6LAD, called KMUD and had them announce that anyone needing the Health Center in Redway should call the hospital instead. Ben Richard, KF6CYM, checked the phones in Garberville and called in to say that they were working. Frank Haskins, KE6LHX, said he was on his way to relay from the hospital Amateur Radio system or with his HT.

Teresa Green, KF6KBU, checked in from the hospital, and though she had to resume her normal duties at the hospital, she was able to give Frank a better picture of what to expect. Joe Cardoza, KA6ROM, said that he was at the hospital and established communications with the Health Center via the SHARC Club 146.79 repeater.

Joe asked Margaret to establish a simplex frequency of 146.580. Margaret could not at that time, so Frank diverted to the Health Center. He arrived and found Margaret and they tried to establish simplex contact. Margaret's HT was not able to make the trip to Garberille. Though there was no extreme traffic to handle, everyone took time out of their busy day, just to be sure that if an emergency should arise, there would be HAMs In Service!

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Franklin Institute station to close

Newsline

A famous ham radio sttion, long accessible to the public may be closing down for good. Bob Joseweit, WA3PZO, reports via the Hudson Division Loop electronic newsletter that that the famous Franklin institute and Science Museum amateur radfio station in Philadelphia may be done away with. According to Joseweit, plans call for the station floor space to be converted into offices sometime this summer.

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Tropical Hoboree

Newsline

Attendance was definitely up at this years Miami Tropical Hamboree, but two things were missing. There were very few youngsters and even less used Amateur Radio equipment.

Vendors in the commercial display area were elated at the size of the crowd and the way that those attending were spending. They say its a lot better than 1997 when attendance and spending was down from previous years.

But, several did remark that there were very few teen or pre-teen age HAMs in sight. Rather, the crowd seemed to be composed of elderly HAMs and an almost equal number of non-HAMs who were busy in the flea market area buying and selling computer gear.

Ironically, new and used computers seemed to be the big flea market item, with little ham gear to be found. In this, the Tropical Hamboree seems to have fallen in line with the trend of most ham radio conventions to become computer swap-meets as well.

The flea market computer deals at this years Tropical Hamboree were very good - if not the best ever. As a result, HAMs are speculating that it may be that the computer industry that will save ham radio conventions from going the way of the dinosaurs.

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Ice storm efforts earn kudos for Amateur Radio

ARRL Newsletter

HAMs in Oregon also were called into action in mid-January when an ice storm knocked out power and telephone service, putting much of the Portland area into a bind. ARES members were called in to help handle communication tasks for local emergency agencies.

Ironically, Kevin Hunt, WA7VTD, John Williams, WB7SJL, and Billy Toman, N7WXD, formed the Oregon City Amateur Radio Emergency Service Club just a week before the ice storm hit. Williams says the club has nearly 30 members.

The HAMs' ice storm activities garnered great publicity for the hobby in an article in the January 23, 1998, edition of the Oregonian newspaper. The article quotes Oregon City Fire Chief Jim Davis as a strong advocate of ARES. It also mentions other past emergencies in the Northwest where HAMs were able to provide a helping hand.

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Self-taught YL

Helen Douglass, W5LGY

My introduction and desire to become an Amateur Radio operator was not the result of having read about it having been in a radio station of any kind.

At the tender age of seven I caught a case of code fever while hearing code at the Western Union station. At home my mother explained what it was all about, that trains and ships could call out for help by sending SOS by sounding their whistles.

Two years later, Mother and I were in Galveston, Texas visiting aboard the *USS Kilpatrick* and were shown the radio room. I surprised the radioman by asking if he ever had sent an SOS when at sea. He turned his radio receiver to hear a ship's message while I had earphones on my head. Immediately I recognized the difference in the sounds of the two tones that I heard. He explained his message was coming by air via an antenna and a receiver. Then he let me try to send code with his oscillator.

A couple from Iowa, who were interested in short-wave, became our neighbors across the street. He soon became acquainted with all of us "small fry" in the neighborhood and persuaded us to help him raise a 20-foot-tall (A-frame) antenna. It was our job to hold the guy wires as he raised the pole upright. When all the guy wires were tied down he put the far end of the antenna wire onto his "box" inside the house. There he showed us how he could, by turning a few knobs, let us hear voices far away (WFAA). After listening with them for a while, my sister and I decided we would like to have one of those "boxes". He agreed to teach us how to make one. Father decided it was to much for our young minds, and too expensive.

Four years later we moved to the country. One day Father announced he had acquired, for the store, the dealership for the FADA Neutrodine, battery-operated radio receiver. Quickly mother asked WHO was to install it, as he knew NOTHING about it! He said the salesman had suggested,"...it would be easy for Helen to do that." There I was, thrown into the sea of radio ignorance to find my way ashore. I would be installing antennas, grounds, and batteries just as I had done for our neighbor.

We learned the life of a dry cell battery was short, and that programs came in better after sun down. In 1925 we bought our AC-powered Stewart Warner cabinet receiver with a short-wave converter that I never did learn to use, as no instruction book came with receiver.

In the fall of 1939 three recently licensed university attending Hams came to the store to have my father build a steel chassis for them. They were changing their "breadboard" chassis into metal. Three days later they were back asking to have holes punched for the mounting of sockets, switches, etc. While holes were being punched one asked why, with all of this good, equipment I was not a Ham. I asked how to get a license. The answer I received was: "All you have to do is to buy the *ARRL Handbook*, an *ARRL; License Manual,* and get a free copy of Allied Radio's parts catalogue. Read the introductory chapters in the *ARRL Handbook,* learn, and memorize the questions and answers, and learn to send and receive 15-wpm Morse Code. Then, when you think you are ready, go to Dallas on a Tuesday at 9:00 am and take the test."

That's all the help I got!!! There was no mention of there ever being a need to have a key to practice with or a short-wave receiver that would help you learn code. I didn't know one existed. Father vetoed my learning radio, but Mother encouraged me. Bless her heart.

Trying to learn code alone was a big nightmare, so I bought a S9R Hallicrafter receiver I saw advertised in a Q and A manual. I accidentally stumbled across Miss Lorena Ensor, W9UA, and her brother, Marshall Ensor, W9BSP, on the air sending 5 wpm, code (nightly) for beginners and faster speeds for the more advanced.

All went well until December 7, 1941 put all amateurs off the air for the duration of WWII. This convinced me that an Instructograph Code Machine was the ideal code teacher I needed., since the machine could be made to send at any speed (5 to 30 wpm by adjustment). To this I added an AC code oscillator and key so that I could send along with the tape. As I was learning code with the machine and receiver I found regular BBC newscasts and a station in Johannesburg, South Africa. I heard that World War II was over on that South African station.

On a Tuesday at 9:00 am I went to take the code test. The very nice gentleman said I copied 12 of the 15 words correctly. The next two attempts at code tests were taken under direction of the chief engineer who told me that radio was not for females. He always set the code machine so that it was too fast for me to copy. Each time I failed I had to wait 90 days before being eligible to try again. To take the tests meant a 150 mile drive to Dallas on rationed gasoline, plus having to be out of the store half a day. A lady Ham who had suffered the same treatment told me the chief engineer would not be in the office one certain Tuesday. Believe me, ***I*** was there and passed easily. The test papers were sent to Washington. Then I had to endure the long wait for the license to arrive. Finally on February 2, 1945 my Amateur Radio Operator license arrived, making that the happiest day of my life. There was no code, only more theory, for the advanced class test that gave me my Class A license.

Soon I began assembling the Stancor transmitter kit I had bought three days before Dec. 7th. It was a maddening experience, with no instructions and no one to tell me what those dozens of parts were, or how to put them together. For help I turned to the Allied catalogue, and Appendix I in the handbook, where beautiful photographs helped me recognize the different parts. Had I had instructions like the Heath Co. did for their kits, life would have been easier.

When the Ham bands finally opened I anxiously tried to get on the air, but THAT is another story. There was some much-needed help available then.

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Who discovered HF "skip" propagation?
Bob Buus, W2OD

As many of you know, common radio knowledge up until the 1920s was that the longer wavelengths were best for

reliable communication over long distances. Up until 1912,, there were no frequency allocations and radio amateurs shared the spectrum with the US Navy and commercial interests on a equal basis (actually some amateurs were the best operators and had the best equipment). After many unsuccessful attempts by other interests to shut the amateurs down completely, a compromise was finally reach whereby the amateurs were restricted to those wavelengths less than 200 Meters (all frequencies above 1.5MHz). Amateurs then sought to span the Atlantic on these shorter wavelengths with unsuccessful test run in 1920. Finally, in December 1921, 1BCG in Connecticut was copied in England (as were several other American amateurs) and the Transatlantic tests were deemed successful. From this knowledge of history, many amateurs conclude that "skip" was discovered by amateurs on their "worthless" frequencies. Although this would be a nice ending to a fascinating story, it simply is not true, although it might have been as you will see from the following story. Actually, all of the transatlantic tests were conducted at the lowest frequency (200 Meters) at which amateurs were legal since common knowledge said that the lowest frequencies were best. Furthermore, all of the successful transatlantic communication occurred at night.

So then, who did discover the one distance "skip" that we take for granted on 40, 20, 15, and sometimes 10 Meters, i.e. the skip off the F2 layer of the ionospere? Would you believe it to be none other than Guglielmo Marconi, the father of radio?

The following story is excerpted from a speech entitled "Wrong Roads and Missed Chances - Some Ancient Radio History" by Edwin H. Armstrong in 1951 when he was given the Washington Award by the Western Society of Engineers. By the way, this is the same Major Armstrong who invested the regenerative detector, the superheterodyne receiver, the super-regenerative detector, and frequency modulation. So here we have the story of a significant accomplishment by one great radio pioneer (Marconi), as told by another great radio pioneer (Armstrong). I hope you enjoy it.

"The ending of World War I released the experimental energies of a very able engineer of the British Marconi Company, C. S. Franklin. Following up some work of Marconi for the Italian Army with short wave directive beams, Franklin established a telephone circuit between London (Hendon) and Birmingham in 1920, on the extremely short wave of 15 Meters. That wave length was chosen - not for any expected advantage in transmission - but because it was easy to set up a reflecting antenna for waves of that order, and because loss of range, i.e., the "daylight effect" does not occur over a short a transmission path (100 miles). The Hendon and Birmingham transmitters had effective radiated power of about 4 kilowatts and the system worked well.

"In a paper presented before the AIEE and IRE in New York City in June 1922, Marconi told about some of his recent work in radio, including the work for the Italian Army with directive beams and the 15 Meter Hendon-to-Birmingham telephone circuit. He suggested radio has perhaps got into a rut by confining practically all its research to the long waves, and that more attention should be given to the shorter waves; and he summed up his remarks with the prophetic words; 'I have brought these results and ideas t your notice as I feel - and perhaps you will agree with me - that the study of short electric waves, although sadly neglected practically all through the history of wireless, is still likely to develop in many unexpected directions, and open up new fields of profitable research.'

"Upon his return to England, Marconi began a series of classic experiments from the historic Poldhu site, which took him on a cruise in his yacht *Elettra* to the Cape Verde Islands in the South Atlantic during the spring of 1923. He had set up a transmitter at Poldhu on the longest 'short' wave for which it was then practicable to build a reflecting beam antenna - 97 Meters. He listened to the Poldhu signals as he cruised south, and found them to be extraordinarily good. In the Cape Verde Islands, over 2,500 miles from the transmitter they were far better than any signals that had ever been received over a comparable distance from a high power long wave station. Marconi reported that even when the power at Poldhu had been reduced to 1 kilowatt, its signals at night were still better than those received from the highest powered transoceanic stations in the British Isles. While the usual disappearance of the signals during daylight hours occurred, Marconi observed that the signals lasted for a time after sunrise at Poldhu and that they became audible again before darkness had set in at the Cape Verde Islands.

"That observation led him to suspect that some n phenomenon was present in the short wave band; and after his return to England he laid out a program of further experimentation for the following year, when he would compare the signals at 90 Meters with those on a number of shorter wave lengths, down to the region of 30 Meters. In 1924, he cruised through the Mediterranean to the coast of Syria; and in Beyrouth harbor in September of that year he made the astounding observation that the signals on the 32 Meter wave from Poldhu, some 2,400 miles away, held in throughout the day - they were in fact as good as the night-time signals, whereas a longer wave of 92 Meters, on the same power, behaved much the same as at the Cape Verde Islands. What Marconi was observing was transmission by reflection from that ionized layer of the upper atmosphere which later became known as the F2 layer, after years of observations had laid bare the mechanism by which the effect was produced.

"Returning to England within a month's time, Marconi sent notification of scheduled transmissions on 32 Meters to Argentina, Australia, Brazil, Canada and the United States; and at the appointed times the daylight signals were received in all those countries. From the end of the earth - far-off Australia - came a report of successful reception for 23 1/2 hours out of the 24.

"These astonishing results became still mo astonishing when it is remembered that Marconi was usi only a few percent of the power of the transoceanic long-wave stations, and was unable to take advantage of his directive

beam antenna because of the diversity of the paths of transmission to the various receiving points.

"As sometimes happens with radically new discoveries, the significance of Marconi's results was not generally appreciated, at first, out-side his own organization. But while others hesitated, Marconi, supported by the brilliant engineering of Franklin, moved rapidly, and by the end of 1927 short wave beam transmitters were operating between England and all the principal parts of the Empire - and at speeds (100 words per minute) that no long wave transmitter or cable had ever approached.

"Today, all but a few percent of the world's long distance radio communication is carried out on wave-lengths less than one quarter of the length of the waves originally allotted the amateurs in the 200 Meters that no one else wanted. Perhaps the best measure of the advance from the era of the 'grounded' wave is that it is now routine a few amateurs the world over, with a few hundred dollars worth of equipment, to communicate with each other, and the 'working' of several continents in a single day is no longer the subject of comment.

"We can return now to one of the great missed chances - the chance that every American amateur and radio experimenter had had to tune in the Hendon-Birmingham beam telephone as early as 1922 and discover the daylight wave before Marconi. The Great Circle course of the Hendon beam lay across Eastern Canada and the United States. The 15 Meter wave, as was later found, was a better daylight wave than those in the 30 Meter range, though it was not effective means of receiving such waves - the superheterodyne - had been published.

"Had any radio experimenter in the United States thought to set up a superheterodyne for 15 Meters and listen for the Hendon signals during the daytime, he would almost inevitably have heard them at some time during the day and he, instead of Marconi, would have discovered the daylight wave. But no one had the imagination to set up a receiver and listen. We all 'know' too much about propagation; only a madman in those days would have proposed to receive 15 Meter signals across the North Atlantic, especially during daylight hours.

"There is, however, a consolation for the American experimenters who missed the chance. The master experimenter himself, Marconi, also missed it. Though for more than 20 years he had made it a practice on voyages to the United States to take along receivers to listen to his British stations, when he crossed the Atlantic in the *Elettra* in 1922 it seems not to have occurred to him to take along a 15 Meter receiver and listen to Hendon. Had he done so, and turned the Hendon beam to follow the yacht, he would have discovered the daylight wave two years before he actually did.

"It is seldom given to a man to make two great discoveries, as Marconi did. He created the practical art of radio communication; and a generation later, when the limits of its ability to conquer distance seemed to have been reached, he came along with the discovery that made world-wide radio communication a reality."

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Married, with Amateur Radio
WB2MGP; A8GDT; Newsline

On Saturday, January 10th, Erin Burck, KD4YLR and Don LaFreniere, VA3DJL, were married in East Lansing, MI.

The two first met at the Dayton Hamvention where Don was a speaker at Carole Perry's annual Youth Forum and Erin was in the audience.

They later ran into one another on the air and arranged to meet in person at one of the Southeast Michigan Swapfests. After that, they began dating and conversing on their own secret 2-meter frequencies. Eventually they decided they wanted to spend the rest of their lives with one another.

Amateur radio can be many things to many people, but for Erin and Don its what has made two people into one.

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WRC-97 final acts
FCC

The Final Acts of the 1997 Radiocommunication Conference, WRC-97, signed in Geneva on November 22, are now available. These acts include changes to the international table of frequency allocations, new and revised resolutions and recommendations, and changes to the appendices to the international radio regulations - including the revised plan for the Broadcasting-Satellite Service in Regions 1 and 3.

A copy of the WRC-97 Final Acts is now available for inspection and public review at the FCC's International Reference Center. You can buy a copy of the Final Acts from the International Telecommunication Union, Sales and Marketing Service, Place des Nations, CH-1211 Geneva 20, Switzerland or see the website at: http//www.itu.ch/publications. for more information, contact Audrey L. Allison, International Bureau, Satellite and Radiocommunication Division; (202) 418-0733.

DATE: February 6, 1998

TO: Interested Persons and Community Councils

FROM: Sheila Ann Selkregg, Ph.D., Director Community Planning and Development

SUBJECT: Title 21 Update Concerning Telecommunication and Broadcast Towers

Several events at the federal level have caused the Planning and Zoning Commission to consider revising our zoning regulations with regard to telecommunication and broadcast towers. The first is the Telecommunication Act of 1996 which imposes many limitations on local regulation of antennas. The second is the arrival of high definition television (HDTV) and personal communication devices (PCS).

These two events mean for this community to accommodate HDTV each of our local broadcasters must erect a new broadcast tower somewhere within their market area. The local broadcaster will be required to operate his/her current antenna broadcasting an analog signal for our existing TV receiver's and a digital signal for HD TV's from a second antenna. Eventually the analog antenna will be abandoned.

The Telecommunication Act also means that all the modern communication devices that we have grown accustom to, such as cellular telephone and paging systems, have need for many more antennas than currently exist. The issue before us is how do we accommodate these needs and yet maintain our community vistas and identity.

The Planning and Zoning Commission formed a small committee in February 1996 made up of community council and industry representatives. The committee called on the help of communication industry experts, government experts, and general land owners and residents to aid it in the development of new regulations to meet the community and industry needs.

The attached Planning and Zoning Commission Tower Committee (PZTC) draft ordinance is the result of this committee effort. Since this is a complex and sensitive community issue we are providing for an extended review period with an anticipated Planning and Zoning Commission public hearing in June 1998.

Highlights of proposed ordinance

- Encourages the development of antenna farms for broadcast antennas
- Encourages the use of hidden or stealthy antennas
- Limits broadcast antennas, tallest antennas, to commercial, industrial, PLI and Antenna Farm districts
- Provides for four different types of antenna support structures
- Reduces the maximum height of antennas in residential districts from 75 feet to 65 feet
- Reduces the setback from lot lines for guy wire anchors
- Requires antennas for commercial use in residential zones to be at or on non-residential land uses such as churches, schools, utility substations, street light poles
- Requires antennas not in service to be removed after 180 days
- Requires any telecommunication tower exceeding 65 feet in height to be at least one mile from any telecommunication tower site with towers exceeding 100 feet
- Separates telecommunication towers from broadcast towers for regulatory purposes
- Specifically provides for accessory use antennas
- Varies the setback from lots lines by tower type

For those of you that are not familiar with municipal ordinance formatting the following is a brief explanation of the ordinance. The ordinance divided into sections to separate where amendments to the code are being made. The sections a identified for example as Section 2. WORDS THAT APPEAR IN ALL CAPS BETWEEN BRACKETS [ ] ARE TO BE DELETED. Words that are part of the text and are underlined are new.

Ordinance in brief:

Pages	Section	Provision
1-2		Ordinance Title and purpose
2-4	1	The changes to definitions to be used in the text of the ordinance.
4-26	2-30	The changes to each individual zoning district.
26-30	31	The changes to the development standards for telecommunication and broadcast towers where they are permitted as a principal or accessory land use. For example: a house on a lot would be a principal use and a garden shed would be an accessory use.
31-33	32	The changes to the development standards for telecommunication and broadcast towers where they are permitted as a conditional use.

If you have questions or comments on this draft we can be reached by FAX at 343-4220; by e-mail at alspachds@ci.anchorage.ak.us, or by phone at 343-4215.

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Some suggestions from Rob Wilson about responding to this proposed ordinance:

Anchorage is trying to pass a horrible new law to restrict antennas from being built. Anyone who wants to read the proposed law can find it available on the AARC bulletin board (30 pages).

I have been selected chairman of the Committee of Concerned Citizens (about bad ordinances). I will try to pass along information, but I miss a lot and would like YOU to pass along any news to my Internet address al7kk@alaska.net or give me a call at 248-0976.

Everyone, and I mean everyone, should plan on filling the Council chambers on the day, or days, when they discuss this ordnance. If we don't do this we have a lot to lose. Expect to give a quick speech of two minutes in front of the council, that is about half a type written page.

To make giving the speech a little easier, this is the general format they require:

1. Your name, and where you live. (i.e. Tom Jones, I live in Mountain View, Anchorage, and have been an active voting citizen for many years.)

2. Tell why you are speaking to the council, or what are your 'bona fides'. (i.e. I am a radio amateur, member of the Anchorage Amateur Radio Club, and an electrical engineer with a Ph.D. specializing in communications... etc.)

3. Tell about two or three things you think are bad about their ordnance: Why it is not going to be good for hams, private citizens, business, and government. (i.e. "it is a seriously defective beautification law"; "it is a badly flawed and unworkable regulation for a select few"; it will give special privilege to only the Planning Commissions select few citizens and businesses; it will be a business disaster; an emergency disaster, an aviation disaster (one antenna for an airport!); where is the "antenna farm" zone that they talk about; antennas must not ordinarily be painted; the law restricts covert antennas by limiting the construction methods and demands them too; laws exactly like this are in place in Cuba, Iran, and Iraq, shall we follow their leadership?; or any of the 100 or so other problems with this flawed bill. You can even point out that "we" voted against this same bill nine years ago.) Well... you get the idea. Trade ideas with friends so we hit everything, since you only have time enough for about two or three points.

Well folks, lets show them what a disaster this bill is going to be to private citizens, business, to Anchorage, and to anyone voting for such a bill.

Robert Wilson, AL7KK (listening on 147.30 MHz)

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The 10 blondes

A bartender is sitting behind the bar on a typical day, when the door bursts open and in come four exuberant blondes. They come up to the bar, order five bottles of champagne and ten glasses, take their order over and sit down at a large table. The corks are popped, the glasses are filled and they begin toasting and chanting, "51 days, 51 days, 51 days!"

Soon, three more blondes arrive, take up their drinks and the chanting grows. "51 days, 51 days, 51 days!" Two more blondes show up and soon their voices are joined in raising the roof. "51 days, 51 days, 51 days!"

Finally, the tenth blonde comes in with a picture under her arm. She walks over to the table, sits the picture in the middle and the table erupts.

Up jump the others, they begin dancing around the table, exchanging high-fives, all the while chanting "51 days, 51 days, 51 days!" The bartender can't contain his curiosity any longer, so he walks over to the table. There in the center is a beautifully framed child's puzzle of the Cookie Monster.

When the frenzy dies down a little bit, the bartender asks one of the blondes, "What's all the chanting and celebration about?"

The blonde who brought in the picture pipes in, "Everyone thinks that blondes are dumb and they make fun of us. So, we decided to set the record straight. Ten of us got together, bought that puzzle and put it together. The side of the box said 2-4 years, but we put it together in 51 days!"